MINUTES

OF

THE UTAH RADIATION CONTROL BOARD

April 13, 2010

Department of Environmental Quality, DEQ Building #2

Conference Room 101

168 N 1950 W

Salt Lake City, Utah 84114-4850

BOARD MEMBERS PRESENT

Peter A. Jenkins, M.S., CHP, Chair Elizabeth Goryunova, M.S., Vice Chair Dane L. Finerfrock, Executive Secretary Scott Bird Patrick D. Cone Frank D. DeRosso, MSPH, CIH Christian K. Gardner Colleen Johnson Douglas S. Kimball, DMD Amanda Smith, DEQ Executive Director John W. Thomson, M.D. David A. Tripp, Ph.D.

Total Board Members Attending: 11

BOARD MEMBERS ABSENT:

Edd Johnson Joseph K. Miner, M.D., MSPH

Total Board Members Absent: 2

BOARD MEMBERS ABSENT/EXCUSED DRC STAFF/OTHER DEQ MEMBERS PRESENT

Renette Anderson, PPA Director
Kevin Carney, DRC Staff
Denise Chancellor, Attorney, Atty General's Office
David Esser, DRC Staff
Phil Goble, DRC Staff
Philip Griffin, DRC Staff
John Hultquist, DRC Section Manager
Boyd Imai, DRC Staff
Ryan Johnson, DRC Staff
Craig Jones, DRC Section Manager
Laura Lockhart, Attorney, Attorney
General's Office
Loren Morton, DRC Staff

DRC STAFF/OTHER DEQ MEMBERS PRESENT- CONTINUE

Yoli Necochea, DRC Staff
Fred Nelson, Attorney, Attorney General's
Office
Raymond Nelson, DRC Staff
Tom Rushing, DRC Staff
Donna Spangler, PIO, DEQ – PPA Staff

PUBLIC

Attachment: Public Attendance List

GREETINGS/MEETING CALLED TO ORDER

Peter A. Jenkins, Chairman, called the Board meeting to order at 3:01 p.m. and welcomed the Board members and the public. He indicated that if the public wished to address any items on the agenda, they should sign the public, sign-in sheet. Those desiring to comment would be given an opportunity to address their concerns during the comment period.

I. APPROVAL OF MINUTES (Board Action Item)

a. Approval of the Minutes from the March 9, 2010 Board Meeting

Peter A. Jenkins, Chairman, asked the Board members for corrections to the minutes from March 9, 2010. There were no corrections to the minutes.

MOTION MADE BY ELIZABETH GORYUNOVA TO APPROVE THE MINUTES OF MARCH 9, 2010 AS WRITTEN

MOTION SECONDED BY JOHN W. THOMSON

MOTION CARRIED AND PASSED UNANIMOUSLY

II. RULES No Items

III. RADIOACTIVE MATERIALS LICENSING/INSPECTION (Board Action Items)

a. Proposed Amendments to R313-19, "Requirements of General Applicability to Licensing Radioactive Material" and R313-21, "General Licenses"

Philip Griffin, DRC Staff, addressed the Board on this item. He explained that he was there to present some changes to the proposed rule, R313-19, "Requirements of General Applicability to Licensing of Radioactive Material," and R313-21, "General Licenses." He said that the rules and changes came about due to changes to the U.S. Nuclear Regulatory Commission (NRC) rules in 10.CFR Parts 30, 31, 32, and 150.

RECOMMENDATION:

The Executive Secretary recommended that the Board approve the proposed changes to the Utah Radiation Control Rules, direct staff to file the changes for rule making, and direct staff to give notice to the public of a 30-day comment period.

MOTION BY SCOTT BIRD TO ACCEPT THE RECOMMENDATION AND DIRECT THE STAFF TO GIVE A 30-DAY PUBLIC COMMENT PERIOD

SECONDED BY ELIZABETH GORYUNOVA

MOTION CARRIED AND PASSED UNANIMOUSLY

b. Proposed Amendment to R313-34, "Requirements for Irradiators"

Raymond Nelson, DRC Staff, informed the Board on this item. He said that during the February 9, 2010 Board meeting Craig Jones reported that during the process of pleading the 5-year review of R313-34, "Requirements for Irradiators," it was noted

that the rule incorporated by reference portions of the 2001 edition of the Code of Federal Regulations. It was proposed that the rule be amended to update the incorporated material to the 2010 edition of the Code of Federal Regulations (specifically 10 CFR 36).

Mr. Nelson reported that the Proposed Rule Amendment, DAR No 33368, was submitted to the Division of Administrative Rules on February 10, 2010. The 30-day public comment period began on March 1, 2010 and ended on March 31, 2010. The Executive Secretary did not receive any comments.

RECOMMENDATION:

The Executive Secretary recommended that the Board approve the proposed rule with an effective date of April 25, 2010.

MOTION MADE BY PATRICK D. CONE TO APPROVE THE PROPOSED RULE R313-34, AND TO MAKE THE RULE EFFECTIVE ON APRIL 15, 2010

SECONDED BY FRANK D. DeROSSO

Peter A. Jenkins, M.S., CHP, Chair - Abstained Elizabeth Goryunova, M.S., Vice Chair - Yes Scott Bird - Yes
Patrick D. Cone - Yes
Frank D. DeRosso, MSPH, CIH - Yes
Christian K. Gardner - Yes
Colleen Johnson - Yes
Douglas S. Kimball, DMD - Yes
Amanda Smith, DEQ Executive Director - Yes
John W. Thomson, M.D. - Yes
David A. Tripp, Ph.D. - Yes

The Board members voted on this action: Vote: 10 Yes; and 1 Abstention

MOTION CARRIED AND PASSED

IV. X-RAY REGISTRATION/INSPECTION No Items

V. RADIOACTIVE WASTE DISPOSAL

- a. Proposed Depleted Uranium Rule, R313-25-8
 - 1. Approval: Findings and Opinion Regarding Adequacy of Corresponding Federal Regulations (Board Action Item)

Laura Lockhart, Attorney General's Office, reported to the Board on this item. Ms. Lockhart went over the proposed rule and response to comments received regarding the proposed amendments to Utah Administrative Code R313-25-8 Addressing Depleted Uranium.

The rule (as it now being recommended to the Board) is set forth in Attachment 2. The difference between the two versions is discussed in Part

B of the Board packet.

Ms. Lockhart went over the public comments with the Board. She also went over the changes on the rule R313-25-8, and the Technical Analysis, as it was being presented to the Board. The Board voted on this item.

MOTION MADE BY ELIZABETH GORYUNOVA THAT THE BOARD APPROVE THE RULE AS IT WAS PRESENTED TO THE BOARD

SECONDED BY DAVID A. TRIPP

Peter A. Jenkins, M.S., CHP, Chair - Abstained Elizabeth Goryunova, M.S., Vice Chair - Yes Scott Bird - Yes
Patrick D. Cone - Yes
Frank D. DeRosso, MSPH, CIH - Yes
Christian K. Gardner - Yes
Colleen Johnson - No
Douglas S. Kimball, DMD - Yes
Amanda Smith, DEQ Executive Director - Yes
John W. Thomson, M.D. - Yes
David A. Tripp, Ph.D. - Yes

The Board members voted on this action: Vote: 9 Yes; 1 No; and 1 Abstention

MOTION CARRIED AND PASSED

2. Approval: Recommended Changes to the Proposed Rule (Board Action Item)

Laura Lockhart, Attorney General's Office, reported to the Board that they could see the actual changes in Attachment 2, and the descriptions were on Page 3 of the "Comment Response Document." Ms. Lockhart explained that there were recommended changes. First the U.S. Nuclear Regulatory Commission (NRC) did not approve of using the term "Depleted Uranium" (DU). The NRC recommended using the term "Concentrated Depleted Uranium," and keep the definition that is within the rule. Another change is in Attachment 2, which reads: "Additional simulations will shall be performed for a qualitative analysis for the period where peak dose occurs and the results shall be analyzed qualitatively."

Peter A. Jenkins, Chairman, said that first on the Board's agenda is to accept the changes to the rule as presented to the Board by Ms. Lockhart.

DISCUSSION BY THE BOARD:

Patrick D. Cone said he supported all of the changes as recommended by Laura Lockhart.

Chairman Jenkins said that the Board would now accept public comments

before the Board voted on this item.

PUBLIC COMMENTS:

James O'Neal, Concerned Citizen from Provo, Utah, said that he concurred with the Board's Action, the Depleted Uranium Rule, and the changes. He said that he thought it was wise to protect the public. Mr. O'Neal said that as a member of the public he appreciated the action of the Board.

Ed Firmage, Concerned Citizen, suggested that the minimum period be more than ten thousand years. He said the period needed to be increased to "something that approximated geologic-time:" fifty or one hundred thousand years.

MOTION MADE BY PATRICK D. CONE TO ADOPT THE THREE CHANGES IN THE PROPOSED RULE AS WRITTEN IN ATTACHMENT 2 OF THE DOCUMENT

SECONDED BY FRANK D. DeROSSO

Peter A. Jenkins, M.S., CHP, Chair - Abstained Elizabeth Goryunova, M.S., Vice Chair - Yes Scott Bird - Yes
Patrick D. Cone - Yes
Frank D. DeRosso, MSPH, CIH - Yes
Christian K. Gardner - Yes
Colleen Johnson - Yes
Douglas S. Kimball, DMD - Yes
Amanda Smith, DEQ Executive Director - Yes
John W. Thomson, M.D. - Yes
David A. Tripp, Ph.D. - Yes

The Board members voted on this action: Vote: 10 Yes; and 1 Abstention

MOTION CARRIED AND PASSED

3. Approval: Effective Date of the Depleted Uranium Rule (Board Action Item)

Laura Lockhart, Attorney General's Office, informed the Board on this item. She said the rule change could only be effective from 30 to 120 days after it is published. Ms. Lockhart said that she did not see why they could not get it published on May 1, 2010.

DISCUSSION BY THE BOARD:

David A. Tripp said that the Board had already discussed this action item for a long period of time and they were on the verge of making a decision. Dr. Tripp said that they had listened to the public and listened to everyone; consequently, the Board should approve the rule and proceed with making it effective.

MOTION MADE BY DAVID A. TRIPP TO ADOPT THE MINIMAL TIME PERIOD FOR THE PUBLIC NOTICE

SECONDED BY CHRISTIAN K. GARDNER

Peter A. Jenkins, M.S., CHP, Chair - Abstained Elizabeth Goryunova, M.S., Vice Chair - Yes Scott Bird - Yes
Patrick D. Cone - Yes
Frank D. DeRosso, MSPH, CIH - Yes
Christian K. Gardner - Yes
Colleen Johnson - Yes
Douglas S. Kimball, DMD - Yes
Amanda Smith, DEQ Executive Director - Yes
John W. Thomson, M.D. - Yes
David A. Tripp, Ph.D. - Yes

The Board members voted on this action: Vote: 10 Yes; and 1 Abstention

MOTION CARRIED AND PASSED

b. Presentation: Policy and Legal Considerations for a Blending Rule by Randy Horiuchi (Board Information Item)

Randy Horiuchi, Concerned Citizen and Representing Studsvik, and Joe DiCamillo, General Counsel for Studsvik, reported to the Board on this item.

Mr. Horiuchi said that under the proposal EnergySolutions in the two scenarios they give you would increase the radioactivity of their site by 700% to 844%. He said that if the sight is changed fundamentally by seven to eight times, the public ought to have the right to have this rule be heard and to have an opportunity to discuss it. Secondly, he and others believed there were economic considerations of B and C waste. If you allow B and C down blending, Utah will be accepting two-thirds of the existing B and C waste that is disposed of in this country.

Joe DiCamillo, General Counsel for Studsvik, addressed the Board. He asked the Board to consider the enabling legislation by the Utah Radiation Control Board and by the Utah Division of Air Quality Board, and the Utah Water Quality Board. He said legislation specifically states that separate statutes be created "to promote the planning and application of pollution prevention and radioactive waste minimization measures and to prevent the unnecessary waste and the pollution of natural resources."

Peter A. Jenkins, Chairman, informed the Board that the next agenda item addressed some of the same questions that Mr. DiCamillo referred to. He asked Mr. DiCamillo to remain available should questions arise from the Board.

Chairman Jenkins informed the Board that Energy Solutions had asked to make some public comments on this information item after the presentation.

PUBLIC COMMENTS:

Thomas Magette, Energy Solutions, said that it would literally be impossible for Energy Solutions to take two-thirds of Class B and C waste material. Mr. Magette said first of all Energy Solutions would not take any of the largest Class B and C waste streams activating from nuclear power plants. He said Energy Solutions would also not take any of the B and C medical waste stream (which is the next largest waste stream). He said about half of the waste stream that Energy Solutions expected to take would be from resin from liquid waste processing. He said 700% is a gross misrepresentation.

Mr. Magette said the NRC's Chairman agreed and approved a down blending paper for public release. The paper will be released on April 8, 2010. He said that the Board will know exactly what the NRC's thinking is on this issue. Mr. Magette said that it would behoove the Board to wait for the deliberations in the paper from NRC, since it is literally a few more days, until it is made public.

c. Recommendations from the Radiation Control Board Subcommittee:

1. Approval: Position Statement on Down Blending Waste (Board Action Item)

Patrick D. Cone informed the Board on this item. He said that the subcommittee met on March 15, 2010, and it was the subcommittee's third meeting on the issue. Mr. Cone said that the Board members that met were: Amanda Smith, David A. Tripp, Christian K. Gardner, Peter A. Jenkins, Edd Johnson and Patrick D. Cone. Mr. Cone reported that the subcommittee met to discuss two things: (1) address the down blending of radioactive waste and (2) look at concentrated rule for unique waste streams. Mr. Cone said that he could report that the subcommittee had accomplished both things and had come up with two recommendations. They are in the Board's packet.

He said that the subcommittee did not prohibit looking at a rule in the future. Mr. Cone read the "Position Statement on Down Blending Waste," that was included in the Board packet. He said that the subcommittee encourages the NRC to expand the rule for classification of waste to make sure that the waste classification system is intact, but also has to do with the second policy rule #2 that the subcommittee suggested.

Peter A. Jenkins, Chairman, said that the recommendation to the Board was that the Board accepts the Position Statement as recommended to the Board from #1 thru #3. Chairman Jenkins said the Board would have a discussion on this recommendation and then he would entertain a motion to accept the recommendation by the subcommittee; to accept it with amendments; or to reject the recommendations from the subcommittee.

MOTION MADE BY DAVID A. TRIPP THAT THE BOARD ACCEPTS THE POSITION STATEMENT ON DOWN BLENDING OF RADIOACTIVE WASTE AS CONTAINED IN THE BOARD HANDOUT, WITHOUT FURTHER AMENDMENT

SECONDED BY PATRICK D. CONE

Discussion on Motion by the Board:

The Board members discussed whether the Board felt there was immediate health and safety issues to the public in down blended waste that were not present in other classes of low-level radioactive waste.

Chairman Jenkins asked for members of the Public to come forward and make their comments on this item, before the Board would take a vote on this item.

PUBLIC COMMENTS:

Christopher Thomas, HEAL-Utah, addressed the Board, he said that HEAL-Utah fully supported the Position Statement as articulated. Mr. Thomas said that he would urge the Board members to vote in favor of it. Mr. Thomas asked the Board to look at what the NRC does, because the NRC may have some technical analysis to consider. He said there was some waste taken by Energy *Solutions* that he felt uncomfortable with how the waste became classified as Class A. He said a Position Statement and the rulemaking would be something that HEAL-Utah would support.

Craig Galli, Holland and Hart – Attorney for EnergySolutions, said that if he were the Board's counsel he would point out something that he thought was very important. He said that Board member, Dr. David A. Tripp's statement was "right on the mark." This is an important issue and the pubic, and the regulated community needs to have a say and involvement in the policy. Public comment would allow the Board to get clarification on some of the issues that are obviously technically and legally confusing.

Fred Nelson, Utah Attorney General's Office, said that when the Board adopts a policy statement they do it through the open meetings act. The Board made "Notice" to the public through the Agenda. Individuals at the Board meeting can provide comment to the Board.

MOTION MADE AGAIN BY DAVID A. TRIPP THAT THE BOARD ACCEPT THE POSITION STATEMENT ON DOWN BLENDING OF RADIOACTIVE WASTE AS CONTAINED IN THE BOARD HANDOUT, WITHOUT FURTHER AMENDMENT

SECONDED BY PATRICK D. CONE

MOTION CARRIED AND PASSED UNANIMOUSLY

2. Approval: Policy on Maintaining Waste Classification Integrity (Board Action Item)

Patrick D. Cone informed the Board on this item. He said that one of the issues they discussed during the subcommittee was how the policy would affect Class A, B and C, and greater than C classification. Mr. Cone quoted the policy that was submitted to the Board in their packet. After reading the statement Mr. Cone said that really all it was saying was that the Board wanted the classification system to be what it is and without circumvention. He said hopefully this would be a notice to the rule makers back East

(Federal) that the Board was interested in classification integrity.

Chairman Jenkins said that the other part of this was that the Board not make any decisions based upon what might be, or what could be, but rather what is.

Chairman Jenkins asked if there was a discussion on the statement. There was none by the Board. Chairman Jenkins asked for a motion from the Board to adopt, or reject, or to adopt with amendments the subcommittee's recommendation to the Board.

MOTION BY DAVID A. TRIPP THAT THE BOARD ADOPT THE POLICY MAINTAINING WASTE CLASSIFICATION SYSTEM INTEGRITY AS SUBMITTED TO THE BOARD

SECONDED BY CHRISTIAN K. GARDNER

MOTION CARRIED AND PASSED UNANIMOUSLY

3. Consideration of Proposed Rule for Site-Specific Performance Assessment (Board Action Item)

Patrick D. Cone, reported to the Board that this item was a little bit more comprehensive. He said this rule looked at "Rule for Site-Specific Performance Assessment," on unique waste streams. Mr. Cone said that he had seen a number things "come down the pipe" towards them, and he thought it would be nice to have a "logic tree" in place.

After reading the proposed rule Mr. Cone said that the rule would provide a structure and a process where licensees know what to expect when they are applying for a waste stream that is not clearly defined, and how the Board or the Executive Secretary will address it.

Mr. Cone said that the recommendation from the subcommittee was that the Board adopt this rule and to go to a rulemaking process.

Amanda Smith, DEQ Executive Director, asked Chairman Jenkins to explain the reasoning behind creating a general rule for people who were not in attendance at the last Board meeting.

Chairman Jenkins said that three or four issues have come before the Board where the Board has wanted to say: "hey, before a new and unknown scenario does occur, the Board would like to see a performance assessment and the Board would like to "weigh in" on some of the issues of the Performance Assessment." The Board has not been in a position to halt processes that have become an issue or to require an assessment as part of the Board's process. Chairman Jenkins said that as Patrick D. Cone had mentioned eighteen months ago about having a Depleted Uranium Performance Assessment--if a Performance Assessment Rule (such as this) were in place before, then the first part of the meeting today would have been unnecessary.

Chairman Jenkins said he would like to think of this rule this way, if the primary purpose of this committee is to assure public health and safety and the primary scientific tool we have to ensure that it is the Performance Assessment, then the Board needs the authority to require requiring a Performance Assessment. Now it is good practice and as EnergySolutions has said numerous times they do this as part of business anyway.

It is a prudent rule to have in place. There are situations where there is clear precedent for how this waste is handled, and we can proceed. Issues have arisen not only for Energy*Solutions* but also for Denison Mines (alternative feed material). He asked the Board if there were further discussion or if there would be a motion,

The Board discussed that they would like to add a time period to the public comment period and agreed on 60-days.

Legal counsel, Fred Nelson, Attorney, said that the rule read "Consideration of the Proposed Rule." Mr. Nelson said that the Board has two choices as he understood it based on this description; you can either (1) propose it for public comment as a rule and notice it with the archivist or (2) you can send it out simply for public comment, solicit public comment, not post it with the archivist, solicit public comment and bring it back to the Board to decide whether the Board would like to go forward with a proposed rule.

Elizabeth Goryunova left at 5:00 p.m. and was not included on the action item vote. After Ms. Goryunova left there ten Board members left in attendance at the Board meeting and they all voted "yes," on this item.

MOTION MADE BY CHRISTIAN K. GARDNER THAT THE BOARD SEND THE RULE OUT AND SOLICIT COMMENT FOR 60-DAYS AND AT THE END OF 60-DAYS CONSIDER THE RULE FOR RULEMAKING

SECONDED SCOTT BIRD

Peter A. Jenkins, M.S., CHP, Chair – Yes Scott Bird - Yes Patrick D. Cone - Yes Frank D. DeRosso, MSPH, CIH - Yes Christian K. Gardner - Yes Colleen Johnson - Yes Douglas S. Kimball, DMD - Yes Amanda Smith, DEQ Executive Director - Yes John W. Thomson, M.D. - Yes David A. Tripp, Ph.D. – Yes

The Board members voted on this action: Vote: 10 Yes

MOTION CARRIED AND PASSED

VI. <u>URANIUM MILL LICENSING AND INSPECTION</u>

No Items

VII. OTHER DIVISION ISSUES (Board Information Items)

a. Report: Tc-99 Sample Results from the Savannah River DU LLRW at EnergySolutions

John Hultquist, DRC Section Manager, and Ryan Johnson, DRC Staff Member, reported to the Board on this item. John Hultquist asked the Board to refer to the item in the supplemental packet. He said that back in February, 2010 Governor Gary R. Herbert asked the Division to sample the DU material that had came in from the Department of Energy (DOE), Savannah River Site (DOE-SRS). Mr. Hultquist said they went out to the Energy *Solutions* Clive Facility on February 23 and March 1, 2010 and collected 172 samples based on EPA-RCRA waste sampling methodology. Based on the total number of drums that were at Clive, Utah, and a 95% confidence limit the EPA method required the DRC to sample 172 drums.

Mr. Hultquist asked the Board to refer to the "Summary Information about the Sampling Event," on their memorandum. He said they took 172 samples, and they also did some split samples and duplicate samples for a total of 202 samples. The Arithmetic means that it was well below the Class A limits, the maximum concentration in the samples was also well below the Class A limit. Mr. Hultquist asked the Board to refer to the "Sampling Overview," on the back page of the document. He said the bullets are just some of the sampling overview regarding EPA guidance document that they used and the Random Sampling method that we employed and some of the reasons why you do that statistical method approach. Mr. Hultquist said that their conclusion was that the material is Class A waste. He said they also took into account the profile record where it had a density range up to 4.5 g/cc, and put that into the equation, and even with that number, the results were still were well below the Class A limit.

Mr. Hultquist said that on the last page of his report was a graph showing the conclusion of how the sample results came out. Mr. Hultquist referred to the graph and said the thick line on top was is the Class A limit for Tech - 99. He said that the square-triangles on the bottom are the actual sample results for the 172 samples. Mr. Hultquist said that they were very low concentrations, well below the Class A limits. Mr. Hultquist asked the Board members if they had any questions.

Questions by the Board:

David A. Tripp asked if they had looked and had seen anything like gamma-rays from Americium - 241 or anything of that nature. John Hultquist responded that they had only looked at Technicium-99—it was the one that was of greatest concern.

David A. Tripp said if that was the one that seem to the largest of all the gamma peaks they saw.

John Hultquist responded: yes, that was the possible offender for exceeding the Class A limit.

Peter A. Jenkins, Chairman, asked John Hultquist if he could explain the justification of 172 drums in the statistical sampling methods.

John Hultquist said that came about from the EPA-RECLA guidance document. Mr. Hultquist said that they knew the total number of drums they had out there; and to get the 95% confidence, you can "plug and chug" in the formula that is in the record document and that will tell you the number of samples you need to obtain for that confidence interval, and that is how they had come up with that number. He used the formula that was in the RECLA waste sampling document.

b. Division of Radiation Control Quarterly Activities Report

Peter A. Jenkins, Chair, asked the Board if they had any questions on the Division Quarterly Activities Report. The board members had none.

VIII. PUBLIC COMMENT

IX. The Next Scheduled Board Meeting: May 11, 2010 (Tuesday), DEQ Bldg #2, Conference Room 101, 168 North 1950 West, Salt Lake City, Utah 3:00 – 5:00 P.M. THE BOARD MEETING ADJOURNED AT 5:14 P.M.